Chorography for Cyberspace
Cables, Code, and Computer History

Martin Dodge
Department of Geography, University of Manchester

Revolution, Evolution, Imposition? Thinking, Framing, and Doing Digital Geographies
The inaugural symposium of the Digital Geographies Working Group
Royal Geographical Society, London, 30th June 2017
Revolution, Evolution, Imposition?
Thinking, Framing, and Doing Digital Geographies

The inaugural symposium of the Digital Geographies Working Group

Date: Friday 30th June 2017
Location: Royal Geographical Society-Institute of British Geographers, London
Time: 10am to 5pm with coffee from 9.30
Cost: £27 waged/£17 unwaged, lunch and refreshments will be provided.

Join us as we explore the emergent contours of digital geographies, bringing together those working in all the subdisciplines of geography and beyond. A day of conceptualising and discussing the digital, mapping emergent research themes, networking and building community. The day will feature:

- 1-2 minute ‘digital shorts’ to present your work.
- Panel discussion across subdisciplines.
- Afternoon: breakout discussions, the topics of which will be decided by participants.

The morning sessions will be live streamed.
Places are limited, so to book your place go to dqwg.eventbrite.co.uk.
Deadline for digital shorts is Friday 2nd June. Registration closes 16th June.

Any questions, please email Andrew Dwyer: andrew.dwyer@ouce.ox.ac.uk.
Conference sub-committee: Andrew Dwyer, Hannah Awcock, and Isabel Williams.

www.digitalrgs.org
@Digital_RGS #DGWGSymp
Revolution, Evolution, Imposition?
Thinking, Framing, and Doing Digital Geographies
RGS-IBG | DGWG | London | 30th June 2017

Chair
Dorothea Kleine

Panellists
Jon Cinnamon | Ian Cook | Ayona Datta | Martin Dodge | Agnieszka Leszczynski | Gillian Rose

0930 | coffee & registration
1000 | acting chair's welcome by dorothea kleine
1020 | leszczynski digital geographies: a reckoning, and possible ways forward
1035 | rose new media, new methods?
1050 | cook why I refuse to write about followthethings.com, and then do so
1105 | digital shorts

nicholson creative geovisualisation | dornelles gendered geographies of online gaming
rogers ambient participation and urban transformation | rella blockchain technologies and digital money
awcock investigating the use of social media during protests | de sabbata exploring VGI using data mining
swords patronage platforms | rush-cooper geographies of digital games

1125 | morning break
1140 | cinnamon geographies of corporate data hegemony
1155 | datta mapping Violence Against Women (VAW): the blindspots of gendered big data in the smart safe city
1210 | dodge a choreography for cyberspace: cables, code and computer history
1225 | digital shorts

jones playful methods lab | bos playful possibilities: digital games and technologies for social change
miles sexuality & the city: locative media and queer urban geographies | thornhill stopping gender-based violence

1255 | panellist discussion chaired by dorothea klein
1330 | Lunch
1430 | afternoon overview by phil jones
1445 | breakout session 1
1530 | afternoon break
1545 | breakout session II
1630 | feedback & wrap-up
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Encountering cyberspace

- 1980s - ZX Spectrum, BBC micros; first PC & MS-DOS
- Early 1990s, gopher, usenet news, ftp sites
- Web and hyperlinks
- Writing web pages and thrill of online publication
- Digital technologies of mapping and then applying mapping to understand digital technologies

Archaeological approach: Encounter > Collect > Select > Categorise and Metamorphosis
Hello,
I am undertaking a dissertation concerning insurance risk mapping at fine spatial resolutions.

I would appreciate any help, information or references relating to the use of GIS in insurance business.

Thanks in advance, Martin Dodge

There are several companies who are using digital maps from Etak Inc in California to assess risk profiles for the insurance industry. The digital maps from Etak are accurate to 1:24000 and have addressing. Software tools from Etak in the form of "C" language libraries allow companies to integrate the mapping and geocoding (given an address, determine Lat/Long) into their applications. For more information please send e-mail to "info@etak.com" on Internet.

What does "accurate to 1:24000" mean??

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Duane F. Marble
E-mail: dmarble@magnus.acs.ohio-state.edu
Department of Geography
The Ohio State University
Columbus, Ohio 43210
Telephone: (614) 292-2250
Fax: (614) 292-2218
Doing Cybergeography or really a chorographic take on internet

- Sought systematic overview, but really ended up with snapshots of particular places on the internet and distinct regions of online community

- *chora*, (‘country’), or *choros*, (‘space or place’) + *graphia*, (‘writing’)

- “everything you want to say about a place”; try to capture the *genius loci*
PhD thesis: Understanding Cyberspace Cartographies: A Critical Analysis of Internet Infrastructure Mapping

mapping cyberspace

ATLAS OF CYBERSPACE

“The Atlas of Cyberspace explores a remarkable universe of visual representations of the Internet’s diversity, structure and context”

– Vint Cerf, Chairman, ICANN
Cables

• Materiality of the immaterial
• Invisible (buried, small, secret)
• Infrastructural (background)
• Topological versus ‘in-the-ground’
• But what runs over the cables....
Code

• Life blood of the digital
• Social power, production of space
We don’t code, so we can’t decode??
What's going on below the screen?
“the computers and internet-of-things devices you buy are so insecure. Because there are currently no liabilities for lousy software and no regulations mandating secure software, the market rewards software that's fast and cheap at the expense of good. Until that changes, ransomware will continue to be profitable line of criminal business.”  
Bruce Schneier
Computer History

• Left behind by the millennials
• Retreat to the archive....
• Being in Manchester – a ground zero for digital geographies
Imagining the thinking machine: Technological myths and the rise of Artificial Intelligence

Simone Natale\(^1\) and Andrea Ballatore\(^2\)

\(^1\) Loughborough University, UK
\(^2\) Birkbeck, University of London, UK

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Contact: s.natale@lboro.ac.uk

Abstract: This article discusses the role of technological myths in the development of Artificial Intelligence (AI) technologies from 1950s to the early 1970s. It shows how the rise of AI was accompanied by the construction of a powerful cultural myth: the creation of a thinking machine, which would be able to perfectly simulate the cognitive faculties of the human mind. Based on a content analysis of articles on Artificial Intelligence published in two magazines, the Scientific American and the New Scientist, which were aimed at a broad readership of scientists, engineers, and technologists, three dominant patterns in the construction of the AI myth are identified: (1) the recurrence of analogies and discursive shifts, by which ideas and concepts from other fields were employed to describe the functioning of AI technologies; (2) a rhetorical use of the future, imagining that present shortcomings and limitations will shortly be overcome; (3) the relevance of controversies around the claims of AI, which we argue should be considered as an integral part of the discourse surrounding the AI myth.

Keywords: Artificial Intelligence, technological myth, media imaginary, history of computing, new media, software studies, cybernetics, scientific controversies, intelligent machines
Conclusions

• Return to chorographic, revival of regional geography approaches. Overly descriptive?
• Challenge of representation of digital geographies still remain
• Access, seeing beyond the surface
• Do we need to worry about cable? Does understanding the physical get as anywhere? Infrastructuralism and politics
• Need to learn programming ?!?
• Value in history of the present, needed for a deep mapping of digital geographies?
References and Image sources

- Slide 1: Image of one of the first integrated circuits from 1961 and the basis for silicon chips. Source: http://smithsonianchips.si.edu/augarten/i10.htm
- Slide 2: Image source not known
- Slide 3: Author image
- Slide 4: Author image
- Slide 5: Author images
- Slide 8: High-level representations of code. Left image courtesy of G. Tootill shows log book page of a handwritten notion of what is claimed to be one of first computer programmes, written by Tom Kilburn in 1948 at the University of Manchester. Right image ‘Linux Kernel Map’, created by Constantine Shulyupin, www.MakeLinux.net/kernel_map
References and Image sources

- Slide 9: Author image
- Slide 10: Author image
- Slide 12: Image source
- Quotation is by Bruce Schneier, 15 May 2017, NY Daily News,
- Slide 13: Images are author extracts from Illustrated London News article on computer research at the University of Manchester, 24th June, 1949
- Slide 14: Author images